



ENERGY ASSURANCE DAILY

Monday Evening, September 12, 2016

Major Developments

Update: Colonial's 1.37 Million b/d Line 1 Remains Shut September 12 after Gasoline Leak in Alabama September 9; 1.16 Million b/d Line 2 Resumes Normal Operations September 10

Colonial Pipeline Co.'s main gasoline pipeline, Line 1, remained shut on Monday as crews continued remediating a gasoline leak near Helena, Alabama. On Sunday, Colonial said that it expected to restore operations on Line 1 in the latter part of this week. Colonial shut down Lines 1 and 2, its main gasoline and distillate pipelines serving the Southeast, on Friday in order to investigate a potential system integrity issue, which was later confirmed as a gasoline leak from Line 1. Colonial on Saturday said Line 2 had returned to normal operations. The Colonial pipeline system connects Gulf Coast refineries with markets across the southern and eastern United States through more than 5,500 miles of pipeline, delivering gasoline, diesel, jet fuel, and other refined products. Lines 1 and 2 run from Houston, Texas to Greensboro, North Carolina, supplying markets in Mississippi, Alabama, Tennessee, South Carolina and North Carolina. Colonial's Lines 3 and 4 move fuels north from Greensboro to markets in Virginia, Maryland, Pennsylvania, and New Jersey before terminating in the New York Harbor area. On Sunday, Colonial said its schedules were being updated due to the impact of its current outage and at a high level, most southern deliveries were down with northern delivery locations being impacted over the next 48 hours. According to Colonial's incident website, crews were continuing to isolate the affected section of Line 1 on Monday, and were implementing additional containment measures.

<https://helena.colonialresponse.com/>

Reuters, 11:39 September 11, 2016

Reuters, 11:51 September 11, 2016

Power Restoration Efforts Continue to Nearly 6,000 Customers in Eastern U.S. September 12 after Strong Storms Knock Out Power to Over 261,000 Customers September 10-11;

A strong line of severe thunderstorms moved across the eastern U.S. knocking out power to at least 261,114 customers beginning Saturday with impacts lasting throughout Monday. As of 3:30 p.m. EDT Monday, 5,944 customers remained without power. Emera, the hardest hit utility with 29,353 customer outages in Maine, said strong winds, with gusts up to 47 mph, downed trees and powerlines. Eversource New Hampshire, which reported 23,469 customer outages, said crews restored approximately 14,000 customers in less than three hours following the Sunday morning thunderstorms. The table below shows total affected customers and the latest reported outages by utility. The "Affected" column shows the total count of customers that lost power at one point or another over the course of the storm for each utility. These outages may not have occurred concurrently and are not the same as peak outages.

Eastern U.S. Customer Power Outages			
September 10 – 12, 2016			
Electric Utility	State	Affected	Latest Reported
Eversource (CPL)	CT	1,991	154
Duke Indiana	IN	1,973	184
Indiana and Michigan Power	IN	1,425	12
Duke Ohio and Kentucky	KY	13,201	12
LG&E and KU Energy	KY	3,489	81
National Grid	MA	13,077	6
Eversource (WME)	MA	5,381	0
Eversource (NSTAR)	MA	2,779	55
Emera	ME	29,353	6

Central Maine Power	ME	13,060	106
Consumers Energy	MI	1,870	1
Eversource (PSNH)	NH	23,469	0
Liberty Utilities	NH	2,442	0
Jersey Central Power and Light	NJ	17,674	28
Public Service Electric and Gas (PSEG)	NJ	3,352	1,101
National Grid Niagara Mohawk Electric	NY	5,666	806
PSEG Long Island	NY	5,000	15
Central Hudson Gas and Electric	NY	4,023	6
New York State Electric and Gas	NY	2,852	175
Orange and Rockland	NY	1,280	0
Consolidated Edison NY	NY	1,983	20
Duke Ohio and Kentucky	OH	10,980	226
AEP	OH	8,999	106
FirstEnergy	OH	7,843	329
South Central Power Company	OH	2,909	2
Dayton Power and Light	OH	2,714	16
FirstEnergy	PA	12,270	768
PECO	PA	3,858	114
PPL	PA	2,479	608
National Grid	RI	1,753	39
Knoxville Utility Board	TN	17,764	7
Nashville Electric Service	TN	11,579	5
Middle Tennessee E M C	TN	9,445	582
Memphis Light Gas and Water	TN	2,913	81
Vermont Utilities	VT	5,095	10
Potomac Edison and Mon Power	WV	3,477	213
AEP Appalachian	WV	1,696	70
TOTAL*		261,114	5,944

*Total outages represent only electric utilities listed in this table.

Sources:

<https://www.eversource.com/clp/outage/outagemap.aspx>
<http://outagemap.duke-energy.com/in/default.html>
<http://outagemap.duke-energy.com/ohky/default.html>
<http://stormcenter.lge-ku.com/default.html>
<https://www.indianamichiganpower.com/outages/outageMap.aspx>
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<https://www.aepohio.com/outages/outageMap.aspx>

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<http://outages.firstenergycorp.com/pa.html>
<https://www.peco.com/Outages/CheckOutageStatus/Pages/OutageMap.aspx>
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<http://azimuth.mlgw.org/OutageSummary.php>
<http://www.mtemc.com/status/status.cfm>
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<http://www.vtoutages.com/>
<http://outages.firstenergycorp.com/mdwv.html>
<https://www.appalachianpower.com/outages/outageMap.aspx>
<https://weather.com/storms/severe/news/severe-storms-new-england-trees-power-lines-down>

Electricity

Thunderstorms Knock Out Power to Over 26,000 Customers in Louisiana September 10

Strong thunderstorms caused flooding and knocked out power to at least 26,928 customers in Louisiana on Saturday with impacts lasting into Monday. As of 3:30 p.m. EDT Monday, 177 customers remained without power. The weather caused flooding in Westwego, Nine Mile Point, and Bridge City, according to Jefferson Parish Emergency Management officials. Pumps, designed to withstand about an inch in the first hour and a half an inch per hour afterward, were turned on, the officials said. The table below shows total affected customers and the latest reported outages by utility. The “Affected” column shows the total count of customers that lost power at one point or another over the course of the storm for each utility. These outages may not have occurred concurrently and are not the same as peak outages.

Louisiana Customer Power Outages			
September 10 – 12, 2016			
Electric Utility	State	Affected	Latest Reported
Entergy Louisiana	LA	20,640	129
Central Louisiana Electric Company	LA	2,158	15
Southwestern Electric Power Company	LA	1,716	0
Southwest Louisiana E M C	LA	1,337	28
Beauregard Electric Coop Inc.	LA	1,077	5
TOTAL*		26,928	177

*Total outages represent only electric utilities listed in this table.

Sources:

http://www.etrviewoutage.com/external/la.aspx?_ga=1.129380489.44922943.1471368048
<https://www.facebook.com/EntergyLA>
<http://outage.cleco.com/external/default.html>
<https://www.swepco.com/outages/outageMap.aspx>
<https://www.slemco.com/site.php?pageID=350>
<http://www.becioutage.org/>
<http://www.ksla.com/story/33065620/rough-weather-across-the-area-results-in-some-flooding-power-outages>

Thunderstorms, High Winds Knock Out Power to 16,000 Hydro-Quebec Customers in Quebec September 11

Thunderstorms producing high winds knocked out power to at least 16,000 Hydro-Quebec customers on Sunday. The majority of outages were due to broken power poles that were toppled by the high winds. As of 3:30 p.m. EDT Monday 2,168 customers remained without power.

<http://poweroutages.hydroquebec.com/poweroutages/service-interruption-report/#map>
<https://www.facebook.com/hydroquebec1944/?fref=ts&rf=104012806302635>
<http://www.ottawacitizen.com/news/local-news/more+than+2c000+montreal+homes+without+power+sunday+morning/12185035/story.html>

Update: PSE&G's 1,092 MW Salem Nuclear Unit 2 in New Jersey at Full Power by September 10

On the morning of September 9 the unit was operating at 60 percent after restarting on September 6. The unit shut from full power on August 31 due to low reactor coolant flow.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2016/20160901en.html>

Dominion's 925 MW North Anna Nuclear Unit 1 in Virginia Shut by September 11

On the morning of September 10 the unit was operating at 96 percent. The cause of the shutdown was not immediately known.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

Duke Energy's 1,129 MW Catawba Nuclear Unit 2 in South Carolina Shut by September 10

On the morning of September 9 the unit was operating at full power. The cause of the shutdown was not immediately known.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

Southern's 856 MW Hatch Nuclear Unit 1 in Georgia Reduced to 50 Percent by September 11

On the morning of September 10 the unit was operating at 96 percent.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

Exelon's 1,022 MW Clinton Nuclear Unit in Illinois Reduced to 80 Percent by September 10

On the morning of September 9 the unit was operating at 99 percent.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

FirstEnergy's 882 MW Davis-Besse Nuclear Unit in Ohio Shut September 10

The unit shut from full power on Saturday due to a main generator lock-out.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2016/20160912en.html>

Calpine's 561 MW Los Medanos Gas-fired Unit in California Reduced by September 11

The unit entered an unplanned curtailment of 297 MW.

<http://content.caiso.com/unitstatus/data/unitstatus201609111515.html>

CDWR's 933 MW Hyatt-Thermalito Hydro Unit in California Reduced by September 9

The unit entered an unplanned curtailment of 315 MW.

<http://content.caiso.com/unitstatus/data/unitstatus201609091515.html>

Petroleum

BP Reports Operations Normal after Flaring at Its 413,500 b/d Whiting, Indiana Refinery September 9

BP Plc reported early morning flaring on Friday at its Whiting refinery. Energy industry intelligence service Genscape said one of the refinery's safety flares operated for about five minutes early on Friday morning. Reuters, 13:57 September 9, 2016

HollyFrontier Reports Power Blip at its 138,000 b/d El Dorado, Kansas Refinery September 9

HollyFrontier Corp said on Monday there was a weather-related power outage at its El Dorado refinery on September 9. Reuters, 13:07 September 12

ExxonMobil Reports Sulfuric Acid Release September 9; Operational Issue at its Baytown, Texas Complex September 12

ExxonMobil Corp reported an ongoing operational issue at its Baytown, Texas Complex on Monday. The complex houses a 560,500 b/d refinery, but it was not specified if the operational issue was at the refinery or other parts of the complex. ExxonMobil reported minimal impact to operations as a result of the operational issue. In a separate incident, on September 9, ExxonMobil reported a release of sulfuric acid from a tubing leak on the pump due to unknown reasons.

Reuters, 13:34 September 12, 2016

Update: ExxonMobil Reports FCCU Operations Normal at its 560,500 b/d Baytown Refinery September 12

ExxonMobil Corp on Monday said the gasoline-producing fluidic catalytic cracking unit 2 was operating normally. The 90,000 b/d FCCU 2 began restarting on Friday after being shut on August 12 to repair a leak.

Reuters, 13:44 September 12 2016

Valero Shuts Alkylation Unit at its 335,000 b/d Port Arthur, Texas Refinery September 9

Valery Energy Corp reported it shut an alkylation unit at its Port Arthur refinery on Friday, according to a filing with the Texas Commission on Environmental Quality.

Reuters, 16:42 September 9, 2016

Shell Reports Leak at its Deer Park, Texas Facility September 12

Royal Dutch Shell Plc reported a leak onsite its Deer Park facility. The facility houses a 316,600 b/d refinery and a chemical plant. Shell said there was no impact to production as a result of the leak and an all clear was issued.

Reuters, 13:41 September 12, 2016

Shell Reports Unit Shutdown at Its Scotford, Alberta Facility September 10

Shell reported a unit shutdown at its Scotford, Alberta facility on Saturday, according to a community alert line. The Scotford facility houses a 100,000 b/d refinery and a 255,000 b/d oil sands upgrader.

Reuters, 20:16 September 11, 2016

U.S. Marshals Service Detains Oil Vessel in Philadelphia, Pennsylvania Port September 9

The U.S. Marshals Service on Friday blocked a Royal Dutch Shell-chartered vessel carrying up to 600,000 barrels of crude oil headed to Delta's Monroe Energy 185,000 b/d Trainer, Pennsylvania refinery outside of Philadelphia from leaving the port in connection with a civil court order, the federal agency said. The vessel, a Malta-flagged Aframax vessel named Advantage Avenue, will be allowed to discharge its cargo, but not allowed to leave the port until a civil dispute originating in federal court involving a payment disagreement is resolved, according to the federal agency. The order was brought by PSARA Energy in federal court in Pennsylvania, according to a PSARA local attorney. The ship is carrying crude oil that was loaded in Wilhelmshaven, Germany, according to a source familiar with the plant's operations along with Reuters Eikon shipping data.

http://www.downstreamtoday.com/news/article.aspx?a_id=53466

U.S. Oil Drillers Add 7 Rigs in Week Ending September 9 – Baker Hughes

U.S. drillers last week added seven oil rigs in the week to September 9, bringing the total rig count up to 414, the most since February, according to Baker Hughes' report on Friday. That is well below the 652 oil rigs active during the same week a year ago, but is up from the recent bottom of 316 rigs seen in May. After falling 206 rigs in the first half of the year, the rig count has increased or held steady every week so far this quarter. The rig count plunged from a high in October 2014 after crude prices collapsed in the biggest price rout in a generation.

http://www.rigzone.com/news/oil_gas/a/146551/Baker_Hughes_US_Oil_Drillers_Add_Rigs_In_Longest_Streak

Natural Gas

Update: Destin Says Capacity Decrease at MP261 JP Lifted September 9

Destin Pipeline said on Friday it would lift the take away capacity decrease for alternate offshore transportation service to Williams to MP261JP. The 24-inch lateral's capacity at MP261JP would be increased to 235 MMcf/d from 195 MMcf/d effective September 10. Destin decreased take away capacity at its MP261 JP Receipt platform by 40 MMcf/d to 195 MMcf/d on September 8 due to downstream turbine work and current flow rates at maximum capacity on its 24-inch lateral.

Reuters, 18:12 September 9, 2016

California Governor Signs Bills to Tighten Greenhouse Gas Emissions Rules September 8

California will tighten controls on greenhouse gas emissions from vehicles, factories, and public utilities under a pair of bills signed on Thursday by Democratic Governor Jerry Brown. The bills extend the state's greenhouse gas emissions reduction program to 2030 and require a reduction in carbon emissions to 40 percent below the level released in 1990. The measures also increase oversight of the state's air pollution control agency by appointing two members of the legislature to the State Air Resources Board and requiring the board to publish emissions data for factories, power companies, and other facilities.

<https://www.gov.ca.gov/news.php?id=19522>

http://www.downstreamtoday.com/news/article.aspx?a_id=53462

Pacific Ethanol Receives EPA-Approved Registration for Cellulosic Ethanol Production at Stockton Plant

Pacific Ethanol, Inc. announced the EPA has approved its registration for generating cellulosic ethanol and D3 cellulosic renewable identification numbers (RINs) at its Stockton, CA plant from corn fiber using Edeniq, Inc.'s Pathway Technology. This is the first ever EPA registration incorporating this process. Pacific Ethanol began producing cellulosic ethanol at its 60-million-gallon capacity per year Stockton, CA plant in December 2015 using the Edeniq, Inc. Pathway Technology, which integrates Edeniq's Cellunator high shear equipment with cellulase enzymes to convert corn kernel fiber to fermentable sugars. The process enables producers to quantify the amount of cellulosic ethanol produced within their plants and comply with the registration, recordkeeping and reporting required by the EPA to generate cellulosic D3 RINs as defined by the federal Renewable Fuel Standard.

<http://ir.stockpr.com/pacificethanol/press-releases/detail/485/pacific-ethanol-receives-epa-approved-registration-for-cellulosic-ethanol-production-at-stockton-plant>

International News

Iran Begins Construction on its 1,057 MW Nuclear Power Plant

Iran and Russia broke ground Saturday on construction of a new nuclear power plant in southern Iran. The project is part of a 2014 deal between Moscow and Tehran to build two new nuclear power plants at the site of the Bushehr Nuclear Power Plant, located southeast of the port city of Bushehr on the Persian Gulf. The two light-water reactor power plants will cost an estimated \$10 billion and will be completed in about 10 years. Construction is being carried out by Rosatom, the Russian state nuclear power company.

Reuters, 8:01, September 10

Eastern Libyan Commander's Forces Seize Key Oil Ports

Libyan National Army (LNA) forces on Sunday seized at least two key oil ports from a rival force loyal to the U.N.-backed government (GNA), risking a new conflict over the OPEC nation's resources. The LNA said its fighters had full control of Es Sider, Ras Lanuf, Brega and Zueitina. The National Oil Corporation in Tripoli confirmed LNA control of Es Sider and Ras Lanuf, while the situation in Brega and Zueitina could not be independently verified. The NOC said a small fuel tank for power generation had been set ablaze in Es Sider. The attacks could derail efforts to restart production, which are seen as critical to saving Libya's economy and helping the GNA survive. Armed conflict, political disputes, and militant attacks have reduced Libya's oil production to about 200,000 b/d from the 1.6 million b/d it was producing before an uprising that toppled Muammar Gaddafi in 2011.

Reuters, 20:11, September 11, 2016

Update: Kazakhstan to Launch Kashagan Oil Production in November

Commercial oil production at the giant Kashagan field in Kazakhstan will begin in November, the chief executive of state oil firm KazMunayGaz said on Friday. Previously the start of commercial level production had been expected in October. Oil will now start flowing from the offshore field, one of the world's biggest discoveries of the past decades, on September 24 and would reach commercial level volumes in early to mid-November. KazMunayGaz signed a contract last month with trader Vitol to arrange a prepayment for its share in the Kashagan oil worth \$1 billion. Kashagan's output will be 50,000 to 1 million tonnes this year, 3 million to 5 million tonnes next year and then 7 million tonnes in 2018, Kazakhstan's Energy Minister said in May. In emailed comments sent to Reuters later on Friday, the ministry said the commercial launch might still occur in October. The Kashagan consortium also includes Eni, ExxonMobil, Royal Dutch Shell, Total, China's CNPC, and Japan's Inpex.

http://www.rigzone.com/news/oil_gas/a/146546/Kazakhstan_To_Launch_Kashagan_Oil_Production_In_November

Energy Prices

U.S. Oil and Gas Prices September 12, 2016			
	Today	Week Ago	Year Ago
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	46.23	44.80	44.70
NATURAL GAS Henry Hub \$/Million Btu	2.92	2.85	2.71

Source: Reuters

Links

This Week in Petroleum from the U.S. Energy Information Administration (EIA)

<http://www.eia.gov/oog/info/twip/twip.asp>

Updated every Wednesday.

Weekly Petroleum Status Report from EIA

http://www.eia.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html

Updated after 10:30 AM & 1:00 PM ET every Wednesday.

Natural Gas Weekly Update from EIA

<http://www.eia.gov/oog/info/ngw/ngupdate.asp>

Updated after 2:00 PM ET every Thursday.

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<http://www.oe.netl.doe.gov/ead.aspx>

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